

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,350	03/06/2002	Stefan Wilhelm	LINDE-581	7250

23599 7590 09/11/2002

MILLEN, WHITE, ZELANO & BRANIGAN, P.C.  
2200 CLARENDON BLVD.  
SUITE 1400  
ARLINGTON, VA 22201

EXAMINER

ATKINSON, CHRISTOPHER MARK

ART UNIT	PAPER NUMBER
----------	--------------

3743

DATE MAILED: 09/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
--------------------	-------------	-----------------------	---------------------

EXAMINER
----------

ART UNIT	PAPER NUMBER
----------	--------------

DATE MAILED:

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

**OFFICE ACTION SUMMARY**

- ☐ Responsive to communication(s) filed on \_\_\_\_\_
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

**Disposition of Claims**

- ☒ Claim(s) 1-11 is/are pending in the application.
- Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-11 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

**Application Papers**

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

- ☒ Notice of Reference Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

Art Unit: 3743

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1-2, 6, 8-9 and 11 are rejected under 35 U.S.C. § 103 as being unpatentable over the known prior art in view of Pabst.

The known prior art (Jepson type claim) discloses all the claimed features with the exception of the heat exchanger being arranged movably in the vessel.

The document of Pabst discloses that it is known to have a heat exchanger being movably arranged within a vessel for the purpose of locating the heat exchanger as desired within the heat transfer fluid of the vessel. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in the known prior art a heat exchanger being movably arranged within a vessel for the purpose of locating the heat exchanger as desired within the heat transfer fluid of the vessel as disclosed in Pabst. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have three heat exchanger,

Art Unit: 3743

since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Claims 1-4 and 6-11 are rejected under 35 U.S.C. § 103 as being unpatentable over the known prior art in view of Iriarte. The known prior art (Jepson type claim) discloses all the claimed features with the exception of the heat exchanger being arranged movably in the vessel.

The patent of Iriarte discloses that it is known to have a heat exchanger being movably arranged within a vessel in two spatial directions for the purpose of locating the heat exchanger as desired within the heat transfer fluid of the vessel. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in the known prior art a heat exchanger being movably arranged within a vessel in two spatial directions for the purpose of locating the heat exchanger as desired within the heat transfer fluid of the vessel as disclosed in Iriarte.

Claims 4-5 are rejected under 35 U.S.C. § 103 as being unpatentable over the known prior art in view of Pabst as applied to claims 1-2, 6, 8-9 and 11 above, and further in view of Morison.

The known prior art (Jepson type claim) as modified, discloses all the claimed features with the exception of two heat exchangers.

The patent of Morison discloses that it is known to have two movable heat exchangers for the purpose of increasing the amount of heat transfer surface area and being able to obtain the desired amount of heat transfer. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in the known prior art as modified, two

Art Unit: 3743

movable, heat exchangers for the purpose of increasing the amount of heat transfer surface area and being able to obtain the desired amount of heat transfer as disclosed in Morison.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Atkinson whose telephone number is (703) 308-2603.



C.A.

September 9, 2002

CHRISTOPHER ATKINSON  
PRIMARY EXAMINER